



Outreach Promotes Conservation Practices That Protect and Restore Water Quality

Featured Project

An outreach effort based out of southern Minnesota is promoting the use of cover crops to protect and restore water quality, and the outreach is resulting in more landowners understanding the multiple benefits of installing these conservation practices. The Extension Educator, Conservation Agronomist position with University of Minnesota Extension and Rural Advantage that is doing the outreach was partly funded through a competitive grant from the Minnesota Board of Water and Soil Resources (BWSR), which was available through the Clean Water Legacy Act in Fiscal Year 2007. The Extension Educator, Conservation Agronomist is being funded through the North Central Region -- Sustainable Agriculture Research and Education (NCR-SARE) to promote the use of cover crops in Minnesota.

Cover crops in the landscape help prevent soil erosion and nitrate leaching, which in turn reduces turbidity and phosphorus in water bodies. Other benefits of cover crops include increasing soil organic matter, increasing soil tilth, decreasing disease and pest issues, increasing water infiltration, and increasing the number of species of invertebrates (insects, worms, microbes -- these help with pest predation issues and aid in decomposition) and vertebrates (mice, voles, birds -- all of which eat weed seeds) in fields. Certain crop species can drastically increase nitrogen levels in the soil or take-up excess nitrogen so that little leaching occurs. All will put nutrients back into the soil as they decompose.



Rye planted in this field in southern Minnesota will help prevent soil erosion and provide many other benefits.

Jill Sackett, Extension Educator, Conservation Agronomist, University of Minnesota Extension and Rural Advantage, held field days in May 2010 in Lewiston (Winona County) and St. James (Watonwan County). A local cooperator hosted each event, and Sackett presented data from research plots and described the experiences that cooperators have had with cover crops. The events have been an effective way to promote the value of cover crops to local landowners. Further cover crop field days will be held in the fall of 2010 as well as fall and spring through 2012. Further outreach and education events include 3rd Crop Producer Meetings, listening sessions, and surveys. Cost-share dollars are also available through the project for those willing to become a cooperator. Cooperators must be willing to host a field day or speak at an event if applicable. They are also required to keep simple records and conduct a simple on-farm research/demonstration project with their cover crop acres.

Location: The NCR-SARE cover crop project is available statewide, and to date, cooperators have been from Pope, Watonwan, and Lac qui Parle counties with interested producers from Le Sueur, Martin, Brown, Renville, and Fillmore counties. May 2010 field days were held in Lewiston (Winona County) and St. James (Watonwan County). An August 2010 field day will be held near Madison (Lac qui Parle County).

BWSR Featured Project

Partners: The following organizations are jointly funding the Extension Educator, Conservation Agronomist position: Rural Advantage, Greater Blue Earth River Basin Alliance, Bush Foundation, The McKnight Foundation, North Central Region-Sustainable Agriculture Research and Education, BWSR (Clean Water Legacy Act grant), and the Minnesota Pollution Control Agency (Clean Water Partnership Phase II Implementation Grant Agreement).

Project Timeline: The position started in fall 2005 – entirely grant funded. The project started in fall 2009 and continues until fall 2012. The cover crop topic will be discussed at the 2011 Third Crop Producer Meetings, field days each spring and fall through 2012, and various listening sessions throughout Minnesota.

Keys to Success: Partner organizations are promoting the multiple benefits of cover crops to landowners instead of relying on landowners to express interest. This project will see success due to the cooperators and event attendees and their willingness to utilize cover crops. It is a goal to develop some simple best management practices that will assist farmers in using different cover crops. The possible use of cover crops as an energy source or third crop are two further possible outcomes.



Field of rye with a small demonstration and research plot for rainfall and runoff research.

BWSR role: BWSR provided a competitive grant through the Clean Water Legacy Act to partly pay for the position of Extension Educator, Conservation Agronomist. The position is also partly funded by the Greater Blue Earth River Basin Alliance, a joint-powers of counties and Soil and Water Conservation Districts (SWCDs).

Measurable Outcomes: The major outputs of this project will be farmer to farmer learning, on-farm cover crop demonstration, and research and outreach to increase the base knowledge levels of cover crops with farmers and resource agency staff in Minnesota and Iowa. The goal is to use annual surveys to attempt to find the number of acres of cover crops planted directly due to our outreach efforts as well as the changes made by those already utilizing cover crops.

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